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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,033	11/14/2003	Christophe Nicot	021305-00197	7515

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EXAMINER

GOODEN JR, BARRY J

ART UNIT PAPER NUMBER

3616

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/712,033

Applicant(s)

NICOT ET AL.

Examiner

Barry J. Gooden Jr.

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/14/03 (Preliminary Amendment).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 8, "deformation sensor is chosen from amongst sensors comprising strain gauges based on..." is unclear.

Examiner suggests replacing the section above with -- deformation sensor is a strain gauge selected from the group comprising... --.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Biddle et al., US Patent 5,979,218.

In regards to claims 1 and 2, Biddle et al. show all of the claimed elements including a suspension stop (42) for a motor vehicle wheel, comprising:

a device for measuring the forces applied to the vehicle wheel, the device comprising at least one deformation sensor (30) which is associated with the fixed member of the stop so as to measure deformations of the member caused by the forces applied, and a calculation means for calculating, from these deformations the corresponding forces applied;

wherein the device is arranged to measure vertical forces applied to the vehicle wheel (Column 2, Lines 45-67; Figures 3-5).

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***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biddle et al. in view of the Applicant's disclosure (Page 1, Lines 4-20).

In regards to claims 3-6, Biddle et al. disclose all of the claimed elements but does not specifically show the stop to comprise a roller bearing.

Applicant's disclosure teaches that known stops conventionally comprise a fixed member intended to be secured to the vehicle chassis (element 30 of Biddle et al.) and a rotating member (the roller bearing) intended to be fixed with respect to rotation to the suspension spring. In particular, the stops can comprise a bearing provided with a fixed top race, a rotating bottom race and rolling bodies disposed between the said races (Applicant's Disclosure, Page 1, Lines 4-20).

The device of Biddle et al. would in this conventional stop setup be associated with the top race of the roller bearing and thereby the deformation sensors would be associated with the top cup.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the arrangement of Biddle et al. in view of the teachings of the Applicant's disclosure to include a fixed top race, rotating bottom race, and rolling bodies so as to allow the wheels to freely move angularly and withstand the multiaxial forces due to the running conditions.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Biddle et al. in view of the Applicant's disclosure as applied to claim 4 above, and further in view of Welter et al., US Patent 6,056,446.

In regards to claim 7, Biddle et al. in view of the Applicant's disclosure teaches all of the claimed elements excluding the top cup and bottom cup each comprising extensions, which cooperate so as to form a static sealing means.

Welter et al. teach of a bearing comprising outer (12) and inner (2) cups comprising extensions, which cooperate so as to form a static sealing means (Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the bearing of Biddle et al. in view of the Applicant's disclosure in view of the teachings of Welter et al. to include a static sealing means so as to provide a cleaner enclosure for the roller bearing elements and thereby increase the longevity of the roller bearing.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Biddle et al. in view of Gagnon et al., US Patent 5,971,432.

In regards to claim 8, Biddle et al. disclose all of the claimed elements including the deformation sensor being a strain gauge; however, excluding the strain gauge being selected from the group comprising piezoresistive elements, surface acoustic wave sensors, and magnetic field sensors.

Utilizing piezoresistive elements, surface acoustic wave sensors, and magnetic field sensors as strain gauges is old and well known in the art.

Accordingly, Gagnon et al. teach of a strain gauge being selected from the group comprising piezoresistive elements (Column 2, Lines 55-62).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the strain gauge of Biddle et al. as is old and well known in the art and in view of the teachings of Gagnon et al. to include being a piezoresistive element so as to provide accurate and efficient measurement of strain.

### ***Conclusion***

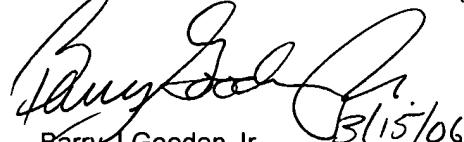
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry J. Gooden Jr. whose telephone number is (571) 272-5135. The examiner can normally be reached on Monday-Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Barry J. Gooden Jr.  
Examiner  
Art Unit 3616

BJG

  
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